

INFORMATION DISCLOSURE CITATION <i>(Use several sheets if necessary)</i>					Docket Number (Optional) PM 98.076/3		Application Number This application	
					Applicants Leonard J. Srnka			
					Filing Date March 11, 2004		Group Art Unit 2862	

U.S. PATENT DOCUMENTS							
*EXAMINER INITIAL	REF	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	1	3,727,231	4/10/73	Galloway et al.	343	813	
	2	4,247,821	1/27/81	Buselli et al	324	336	
	3	4,446,434	5/1/84	Sternberg et al	324	363	
	4	4,535,293	8/13/85	Rocroi et al	324	336	
	5	4,617,518	10/14/86	Srnka, L.	324	365	
	6	4,633,182	12/30/86	Dzwinel	324	335	
	7	4,875,015	10/17/89	Ward, S. H.	324	323	
	8	5,563,513	10/8/96	Tasci et al	324	359	
	9	6,628,119	09/30/03	Eidesmo et al.	324	337	

FOREIGN PATENT DOCUMENTS								
	REF	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	Translation	
							YES	NO
	10	WO 98/28638	07/02/98	PCT (Russian)	G01V	11/00, 9/00, 3/00		
	11	2084929	7/28/97	Russia			<input checked="" type="checkbox"/>	<input type="checkbox"/>

OTHER DOCUMENTS <i>(Including Author, Title, Date, Pertinent Pages, Etc.)</i>	
12	Alumbaugh, D. L. et al, "Three-Dimensional Massively Parallel Electromagnetic Inversion - II. Analysis Of A Crosswell Electromagnetic Experiment", <i>Geophys. J. Int.</i> , v. 128, pp. 355-363, 1997.
13	Alumbaugh, D. L. et al, "3D EM Imaging From A Single Borehole; A Numerical Feasibility Study", <i>SEG Annual Meeting Expanded Abstracts</i> , v. 1, pp. 448-451, 1998.
14	Alumbaugh, D. L. et al, "Electromagnetics 3: Inversion Techniques", <i>SEG Annual Mtg. Expanded Abstracts</i> , v. 1, pp. 456-459, 1998.
15	Buselli, G. et al, "Robust Statistical Methods For Reducing Sferics Noise Contaminating Transient Electromagnetic Measurements", <i>Geophysics</i> , v. 61, pp. 1633-1646, 1996.
16	Caldwell, T. G. et al, "The Instantaneous Apparent Resistivity Tensor: A Visualization Scheme For LOTEM Electric Field Measurements", <i>Geophys. J. Int.</i> , v. 135, pp. 817-834, 1998.
17	Chave, A. D., Flosadottir, A. H. and Cox, C. S., "Some Comments on Seabed Propagation of ULF/ELF Electromagnetic Fields", 1990, <i>Radio Science</i> , Vol. 25, No. 5, pp. 825-836.
18	Cheesman, S. J., Edwards, R. N. and Chave, A. D., "On the Theory of Sea-Floor Conductivity Mapping Using Transient Electromagnetic Systems", Feb. 1987, <i>Geophysics</i> , Vol. 52, No. 2, pp. 204-217.
19	Constable, S. and Cox, C.S., "Marine Controlled-Source Electromagnetic Sounding 2. The PEGASUS Experiment", Mar. 1996, <i>Journal of Geophysical Research</i> , Vol. 101, No. B3, pp. 5519-5530.
20	Dey, A. et al, "Electric Field Response Of Two-Dimensional Inhomogeneities To Unipolar And Bipolar Electrode Configurations", <i>Geophysics</i> , v. 40, pp. 630-640, 1975.

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

FORM PTO-A820 Copyright 1994-97 LegalStar PO9A/REV03 Patent and Trademark Office* U.S. Department of Commerce (also form PTO-1449)

INFORMATION DISCLOSURE CITATION <i>(Use several sheets if necessary)</i>		Docket Number (Optional) PM 98.076/3	Application Number This application
		Applicants Leonard J. Srnka	
		Filing Date March 11, 2004	Group Art Unit 2862
OTHER DOCUMENTS - Continued <i>(Including Author, Title, Date, Pertinent Pages, Etc.)</i>			
21	Edwards, R. N. , "On the Resource Evaluation of Marine Gas Hydrate Deposits Using Sea-Floor Transient Electric Dipole-Dipole Methods", 1997, <i>Geophysics</i> , Vol. 62, No. 1, pp. 63-74.		
22	Egbert, G. D. , "Robust Multiple-Station Magnetotelluric Data Processing", <i>Geophys. J. Int.</i> , v. 130, pp. 475-496, 1997.		
23	Eswarappa et al. "Mixed Boundary Semicircular and 120 Degrees - Sectoral Microstrip Antennas", <i>IEEE Antennas & Prop. Soc. Int. Symp.</i> , June 1989, pp. 1688-1690.		
24	Flosadottir, A. H. and Constable, S., "Marine Controlled-Source Electromagnetic Sounding ` Modeling and Experimental Design", Mar. 1996, <i>Journal of Geophysical Research</i> , Vol. 101, No. B3, pp. 5507-5517.		
25	Garg, N. R. and Keller, G. V., "Synthetic Electric Sounding Surveys Over Known Oil Fields", Nov. 1984, <i>Geophysics</i> , Vol. 49, No. 11, pp. 1959-1967.		
26	Greaves, R.J. , Beydoun, W.B., and Spies, B.R.; "New Dimensions in Geophysics for Reservoir Monitoring", <i>SPE Formation Evaluation</i> , June 1991, pp. 141-150.		
27	Gupta, R. N. et al, "Unipole Method Of Electrical Profiling", <i>Geophysics</i> , v. 28, pp. 608-616, 1963.		
28	Hoversten, G. M. and Nichols, E., "Seaborne Electromagnetic Sub-Salt Exploration", 1992, Abstracts, <i>American Geophysical Union</i> , p. 313.		
29	Hoversten, G. M. et al, "Marine Magnetotellurics For Petroleum Exploration, Part II: Numerical Analysis Of Subsalt Resolution", <i>Geophysics</i> , v. 63, pp. 826-840, 1998.		
30	Hoversten, G. M. et al, "Electromagnetics 2: Modeling For Petroleum And Mining Applications", <i>SEG Annual Meeting Expanded Abstracts</i> , v. 1, pp. 425-428, 1998.		
31	Jupp, D. et al, "Resolving Anisotropy In Layered Media By Joint Inversion", <i>Geophys. Prospecting</i> , v. 25, pp. 460-470, 1977.		
32	Kaufman, A. A. , Goldman, M., Lee, D. S. and Keller, G. V., "Marine Electromagnetic Prospecting System", Apr. 1982, <i>Geophysics</i> , Vol. 47, p. 431.		
33	Kaufman, A. A. and Keller, G. V., <i>Frequency and Transient Soundings</i> , 1983, pub. Elsevier, pp. 285-315.		
34	Leland, R. P. , "Estimation Boundary Value Processes Applied to Shape Determination of a Circular Antenna from Observations on the Boundary", <i>IEEE Proc. 30th Conf. Decision & Control</i> , Sections 4-5, Dec. 1991.		
35	Maurer, H. et al, "Optimized And Robust Experimental Design: A Non-Linear Application To EM Sounding", <i>Geophysics J. Int.</i> , v. 132, pp. 458-468, 1998.		
36	MacGregor, L. M. , Constable, S. and Sinha, M. C., "The RAMESSES Experiment - III. Controlled-Source Electromagnetic Sounding of the Reykjanes Ridge at 57°45'N", June 1998, <i>Geophysics J. Int.</i> , Vol. 135, pp. 773-789.		
37	Mogilatov, V. S. et al, "A New Method Of Geoelectrical Prospecting By Vertical Electric Current Soundings", <i>J. Appl. Geophys.</i> , v. 36, pp. 31-41, 1996.		
38	Nekut, A. G. et al, "Petroleum Exploration Using Controlled-Source Electromagnetic Methods", <i>Proceedings IEEE</i> , v. 77, pp. 338-362, 1989.		
39	Newman, G. A. et al, "Three-Dimensional Massively Parallel Electromagnetic Inversion -I. Theory", Report SAND96-0582, Sandia Nat'l Labs, 1996 and <i>Geophys. J. Int.</i> , v. 128, pp. 345-354, 1997.		
40	Peters, L. J. and Bardeen, John, "Some Aspects of Electrical Prospecting Applied in Locating Oil Structures", 1932, <i>Early Geophysical Papers of the Society of Exploration Geophysicists - Vol. II</i> , pp. 145-164.		
EXAMINER		DATE CONSIDERED	
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.			

FORM PTO-A820

Copyright 1994-97 LegalStar

PO9A/REV03

Patent and Trademark Office* U.S. Department of Commerce

(also form PTO-1449)

SHEET 2 OF 3

INFORMATION DISCLOSURE CITATION <i>(Use several sheets if necessary)</i>		Docket Number (Optional) PM 98.076/3	Application Number This application
		Applicants Leonard J. Srnka	
		Filing Date March 11, 2004	Group Art Unit 2862
OTHER DOCUMENTS - Continued <i>(Including Author, Title, Date, Pertinent Pages, Etc.)</i>			
	41	Sinha, M. C. , Navin, D. A., MacGregor, L. M., Constable, S., Peirce, C., White, A., Heinson, G. and Inglis M. A., "Evidence for Accumulated Melt Beneath the Slow-Spreading Mid-Atlantic Ridge", 1997, <i>Phil. Trans. R. Soc. Lond.</i> , Vol. 355, pp. 233-253.	
	42	Spies, B. R. , "Depth of Investigation In Electromagnetic Sounding Methods", <i>Geophysics</i> v. 54, pp. 872-888, 1989.	
	43	Tarkhov, A. G. , "On Electric Geophysical Exploration Methods Of A Pure Anomaly", <i>Bull. Acad. Sci. U.S.S.R., Geophys. Ser.</i> , no. 8, 11, 1957.	
	44	Verma, S. K. et al, "Focused Resolution Of Thin Conducting Layers By Various Dipole EM Systems", <i>Geophysics</i> , v. 60, pp. 381-389, 1995.	
	45	Zhdanov, M. et al, "Resistivity Imaging By Time Domain Electromagnetic Migration (TDEMM)", <i>Exploration Geophysics</i> , v. 26, pp. 186-194, 1995.	
	46	Zhdanov, M. et al, "Three-Dimensional Quasi-Linear Electromagnetic Inversion", <i>Radio Science</i> , v. 31, pp. 741-754, 1996.	
	47	Zhdanov, M. et al, "Time-Domain Electromagnetic Migration In The Solution Of Inverse Problems", <i>Geophys. J. Int.</i> , v. 131, pp. 293-309, 1997.	
	48	Zhdanov, M. et al, "Preconditioned Time Domain Electromagnetic Migration", <i>SEG Annual Meeting Expanded Abstracts</i> , v. 1, pp. 461-468, 1998.	
EXAMINER		DATE CONSIDERED	
EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP Section 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.			

FORM PTO-A820

Copyright 1994-97 LegalStar

PO9A/REV03

Patent and Trademark Office* U.S. Department of Commerce

(also form PTO-1449)

SHEET 3 OF 3